

## **ELEMENT 2: STAFF**

- A. QUALIFICATIONS AND SUPPORT OF STAFF:** All VESC trainers who will be deployed to work with students in this program are field educators who hold valid state/city certification, and have at least five years of classroom experience, and in many cases, administrative experience.

Services will be delivered at a site to be designated by the LEAs. Supplemental educational services in all areas covered by this proposal will be conducted under direct supervision of VESC's Midwestern States Regional Manager, who is a certified teacher and administrator, while responsibility for overall management and quality control will be assumed by the Chief Operating Officer. Instructional materials aligned with state standards are developed by our Director of Product Development and Chief Education Officer.

VESC will provide ongoing support and monitoring of the program. The following practices govern VESC's relationships with its client schools, assuring smooth operation and a minimization of problems and concerns:

- A close, collegial collaboration between VESC staff and school/district leadership, with VESC adapting its services to the needs of the school/district rather than attempting to impose its own ideas and procedures.
- Flexibility to allow for corrections in the content covered and in the training schedule (insofar as is allowable under the terms of the contract.)
- Assurance that VESC will provide a challenging course of study aligned with relevant local, state, and national standards, and that K-12 students will be able to thrive and reach their full potential.
- Ongoing staff development and support of field educators who will deliver services, by VESC supervisory personnel.
- Agreement between VESC and the school district as to what data will be collected (including documentation of the results of VESC's services), and mutual assurance that all such data gathered by each party will be shared and discussed in a timely fashion. Such sharing of data is vital to the progress of the instruction.
- A professional and collegial relationship between VESC staff (e.g., field educators) and school/district personnel, so that the latter will not hesitate to discuss any difficulties they may encounter.
- Ongoing monitoring of the program, shared with the VESC supervisors and the school leadership to ensure consistent implementation in terms of services, materials and assessments.

## **ELEMENT 3 - PROGRAM EFFECTIVENESS:**

**A. RESEARCH BASE:** The theoretical foundations for the Ventures Initiative and Focus® student-centered system of teaching and learning are found in development psychology, cognitive science, and cognitive neuroscience, and have been used successfully to teach all subjects across the curriculum. Research on the human brain conducted by Caine and Caine provide a strong rationale for the Ventures Initiative and Focus® approach and the ordering of its components. The researchers point out that most of what is taught in schools is "surface knowledge" which often has no meaning to the student, and which must be assiduously memorized in order to be retained. "Meaningful knowledge," on the other hand, is acquired in the course of "joyful" and intellectually challenging activity, makes sense to the learner, and becomes

part of the learner's body of knowledge.<sup>1</sup> The placement of Constructive Communication and Effective Group Process at the beginning of the approach is borne out by the Caines' assertion that [C]ommunication skills...can be a vehicle for expanding knowledge.<sup>2</sup> The loose structure of Problem-Based Learning – which allows for more than one possible solution – is supported by the Caines' finding that in order to increase the brain's capacity to function in complex ways, outcomes should be relatively open-ended, students should have "a sense of ownership in the process," and tasks should have open-ended time lines rather than require completion in a 35-minute period.<sup>3</sup>

In addition to the research presented above, VESC's approach is supported by the findings of such authorities as John Burrell, Howard Gardner, Richard Paul, Robert Sylwester, and Robert Swartz.

A 1999 document, *Theory and Practice: Cognitive Science and the Ventures Initiative and Focus® Program*,<sup>4</sup> by Lance P. Hickey, Ph.D., a philosopher and cognitive scientist, describes the Ventures Initiative and Focus® system, and how it works in relation to the most recent research in these fields. For example, the use of graphic organizers to teach structured thinking skills is supported by Bos and Anders, who found that using relationship matrices improved vocabulary retention, which improved reading comprehension. Bartlett's cognitive schema theory is used to help students make connections when reading. Vygotsky's research on internalizing knowledge through real-life interactions with other people forms the basis of using Thinking Aloud Paired Problem Solving to verbalize solutions to problems in mathematics, English Language Arts, and other subjects.

## **B. RECORD OF EFFECTIVENESS IN RAISING ACADEMIC ACHIEVEMENT IN READING AND**

**MATHEMATICS:** For three decades, VESC and its affiliate, Ventures in Education (VIE), have worked with urban, suburban, and rural schools and school systems, K-12, across the country (*i.e.*, in Alabama, Arizona, Arkansas, California, Connecticut, the District of Columbia, Florida, Indiana, Louisiana, Michigan, Minnesota, Montana, New Jersey, New Mexico, New York, Pennsylvania, Texas, and Utah) to provide student support services and staff development in innovative, student-centered instructional techniques that raise academic background are strong evidence that it recognizes – and helps bring about – the rewards that come with raised expectations for *all* students, particularly those who have been held to lower standards under the guise of "remediation," and have been heterogeneously grouped with others believed to be non-college-bound.

**Methodology:** The following sections include documented evidence of effectiveness in increasing academic achievement in Reading and Mathematics at all levels, K-12, including Special Education students and English Language Learners. In all cases, data included the results of standardized tests or other state assessments, and contained a review of multi-year comparison data. Baseline data was gathered during the year before collaboration with VESC began, and compared to progress after students were exposed to the *Ventures Initiative and Focus®* system of student-centered learning for one or more years. In all cases, the data was gathered either by the school, the district, and/or a third party evaluator. In many cases, such as the state of Louisiana, data was gathered as part of the school report card, which is a public document.

## **ELEMENTARY SCHOOLS**

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<sup>1</sup> Caine, Renata Nummela and Geoffrey Caine, *Making Connections. Teaching and the Human Brain* (1991). Chapter 1.

<sup>2</sup> *Ibid.* Chapter 5.

<sup>3</sup> *Ibid.* Chapter 5

**NEW JERSEY SCHOOL DISTRICT:** As part of the Abbott Decision, VESC has been working with eight elementary schools in one New Jersey school district (New Brunswick) since September, 2000. The chart below shows comparison data of scores achieved by Grade 4 General Education, Special Education, and Limited English Proficiency (LEP) students on the Elementary School Proficiency Assessment (ESPA) in Language, Mathematics, and Science, in the Spring of 2000 and 2001. In all cases, the number of students achieving proficiency or advanced proficiency increased, with language proficiency increasing more than 30% among General Education, Special Education, and Limited English Proficiency students. The number of students achieving proficiency in Mathematics also increased among all student demographic types, ranging from 4.7% among General Education Students to 9% among Special Education students, to 20% among LEP students.

**New Jersey School District Consolidated Results for Eight Elementary Schools**

Subject	Year	Student	# Tested	Scale Mean Score	# Partial Proficiency	# Prof.	# Advanced Prof.	% Partial Prof.	% Prof.	% Adv. Prof.
Lang.	2000	Gen Ed	325	191.3	201	122	2	61.8%	37.5%	0.6%
Lang.	2001	Gen Ed	257	209.3	67	184	6	26.1%	71.6%	2.3%
Math	2000	Gen Ed	322	195.8	180	127	15	55.9%	39.4%	4.7%
Math	2001	Gen Ed	262	199.5	134	110	18	51.1%	42.0%	6.9%
Lang.	2000	SpecEd	50	161.7	45	5	-	90.0%	10.0%	0.0%
Lang.	2001	SpecEd	61	192.2	35	25	1	57.4%	41.0%	1.6%
Math	2000	Spec Ed	51	168.6	43	8	-	84.3%	15.7%	0.0%
Math	2001	Spec Ed	58	182.6	44	14	-	75.9%	24.1%	0.0%
Lang.	2000	LEP	51	168.5	45	6	-	88.2%	11.8%	0.0%
Lang.	2001	LEP	63	194.1	37	26	-	58.7%	41.3%	0.0%
Math	2000	LEP	52	178.8	45	7	-	86.5%	13.5%	0.0%
Math	2001	LEP	62	195.0	35	27	-	56.5%	43.5%	0.0%

**LOUISIANA EDUCATIONAL ASSESSMENT PROGRAM (LEAP) RESULTS:** The charts below show multi-year comparison data for Grade 4 elementary school students in eight VESC schools in Louisiana. These schools represented both rural and urban areas. Before VESC arrived, four of the schools were ranked as "Academically Unacceptable Schools," *i.e.* a school in which a majority of students performed unsatisfactorily on statewide (LEAP) examinations in English Language Arts and/or Mathematics; three were ranked "Academically Below Average," and one was "Academically Above Average." This baseline data reflected the Grade 4 LEAP scores in ELA and mathematics in 1999. 45.4% of the students in these schools were considered to be satisfactory in ELA (Level 2 and higher), while only 30% were satisfactory in mathematics.

In 2001, after working with VESC for two years, there was a marked improvement in both ELA and math scores. 61.4% of students in these schools achieved satisfactory grades in ELA, and 50.8% were satisfactory in mathematics, representing changes of 35.2% and 69.3% respectively. For the academic year 2000-2001, none of the VESC schools were ranked as "Academically Unacceptable Schools." Six of the schools were recognized as achieving "Exemplary Academic Growth" with one earning the label of a "School of Academic Achievement."

**Louisiana LEAP Score Results – Percentage of Students by Performance Category  
English Language Arts Grade Level 4**

	1999	1999	1999	2001	2001	2001
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	Level 4/5	Level 2/3	Level 1	Level 4/5	Level 2/3	Level 1
VESC Schools	4%	44%	52%	11%	57%	32%
Louisiana Statewide	16%	63%	21%	15%	68%	16%

Legend: Level 5-Advanced; Level 4-Proficient; Level 3-Basic; Level 2- Approaching Basic; Level 1- Unsatisfactory

### Louisiana LEAP Score Results – Percentage of Students by Performance Category Mathematics Grade Level 4

	1999 Level 4/5	1999 Level 2/3	1999 Level 1	2001 Level 4/5	2001 Level 2/3	2001 Level 1
VESC Schools	0%	30%	69%	8%	50%	42%
Louisiana Statewide	10%	56%	35%	15%	68%	16%

Legend: Level 5-Advanced; Level 4-Proficient; Level 3-Basic; Level 2- Approaching Basic; Level 1- Unsatisfactory

## MIDDLE SCHOOLS

### LANCASTER, CA :

In California, the Public Schools Accountability Act (PSAA) of 1999 requires the Department of Education annually to calculate Academic Performance Indexes for each school and establish annually a minimum growth target of 5 points for each school. (While it is expected that the API will be comprised of a number of indicators, for 2000 the API was comprised of results from the Stanford 9 test that is administered in conjunction with the Standardized Testing and Reporting (STAR) program.

The table below shows the results obtained in a middle school in Los Angeles County, with 46% minority population and 57% of students eligible for free/reduced price lunch, that began work with VESC during the 1999-2000 academic year. While the total population exceeded the growth target by 4 points, there was greater improvement among Hispanic or Latino students and socio-economically disadvantaged students. Students in the first category improved their scores by 38 points, and those in the second improved by 31 points. This represents a 7.8% and a 6.2% growth rate, respectively.

Students Included in API <sup>1</sup>	Base 1998-1999 Score	1999-2000 Growth Target	1999-2000 Score	1999-2000 Growth
Total 491	573	11	588	15
Hispanic or Latino 166	493	9	531	38
White not Hispanic 238	645	6	646	1
Socio-economically Disadvantaged 297	498	9	529	31

<sup>1</sup>Not the entire school population; numbers represent students in testing grades.

**NEW ORLEANS, LA:** The chart below shows results obtained at a middle school in New Orleans, LA, with a 99% minority population and 81% of students eligible for free lunch. As of the 1998-99 school

year, this school was designated by the Louisiana State Department of Education as an “Academically Unacceptable School.” After one year of full commitment to VESC’s model in 1999-2000, under the CSRD initiative, the school is demonstrating noteworthy progress. In ELA, there was a 6% decrease in students at an unsatisfactory level of achievement (Level 1), and a 5% increase in students at a basic level of achievement (Level 3). The mathematics scores reflected similar results.

GRADE 8 ENGLISH LANGUAGE ARTS			GRADE 8 MATHEMATICS	
Year	Unsatisfactory Level Of Achievement	Basic Level of Achievement	Unsatisfactory Level Of Achievement	Basic Level of Achievement
1999	50%	8%	79%	5%
2000	44% (A 6% decrease)	13% (a 5% increase)	73% (a 6% decrease)	10% (a 5% increase)

## HIGH SCHOOLS

**CATHEDRAL HIGH SCHOOL:** From 1996-2000, VESC and its affiliate, VIE, had an active collaboration with Cathedral High School- a Manhattan school under the jurisdiction of the Roman Catholic Archdiocese of New York-on designing and teaching an interdisciplinary approach to learning in the academic subject areas. PSAT pre-and post-tests were given to over 200 students in February and June 1997, respectively. There was a 12% increase in the mean score on the math section and a 20% increase in the mean score on the verbal section.

Regents examination scores also increased. The table below represents results of Regents examinations for this school over a three-year period, from 1994-95 to 1996-97. After only one year of work with VIE (1996-97), the number of students taking and passing each examination increased, indicating that more students were being held to higher standards, and opting for academically challenging courses. Further, the percentage of students passing remained constant. Generally, when the number of students taking an exam increases, the overall performance tends to decrease.

Subject	Academic Year	# Students Taking Exam	# / % Students Passing	Subject	Academic Year	# Students Taking Exam	# / % Students Passing
Global History 2	1994-95	45	41 / 91%	Biology	1994-95	54	40 / 74%
	1995-96	74	69 / 93%		1995-96	66	44 / 67%
	1996-97	114	99 / 87%		1996-97	108	86 / 80%
Sequential Math I	1994-95	65	49 / 75%	English	1994-95	89	82 / 92%
	1995-96	75	66 / 88%		1995-96	122	104 / 85%
	1996-97	106	81 / 76%		1996-97	130	120 / 92%

[Source: Cathedral High School, NYC]

**REGENTS SCORES IN SEVEN NYC CSRD SCHOOLS:** Since the 1998-1999 academic year, VESC has partnered with seven high schools in New York City, as part of the Comprehensive School Reform Demonstration (CSRD) program. After one year of work with VESC, these schools saw significant improvement in their students' results on the New York State English Regents examination. On average, the proportion of 11<sup>th</sup>-graders in each school who passed with a score of 55 or better increased by 23 percentage points between 1999 and 2000, while the number of students who scored 65 or better increased by an average of 7 points. Furthermore, an average of 90% of seniors across these schools who needed to re-take and pass the English Regents as a requirement for graduation were able to do so. These numbers are especially significant because between 1999 and 2000, the number of students sitting for the English Regents exam increased at an average of 35%. [Source: Board of Education of City of New York]

#### **OTHER DOCUMENTED EVIDENCE:**

Additional documented evidence of the success of the *Ventures Initiative and Focus System of Student-Centered Learning* is found in the following published, independent evaluations regarding the impact on student performance of the Ventures Initiative and Focus® system in K-12 schools located in urban, rural, and American Indian reservation settings. These independent evaluations document successful use of instructional practices that are based on research in developmental psychology, cognitive science, and cognitive neuroscience.

- The McKenzie Group. (1990). *Expanding Horizons: A Vision for Our High Schools. A Report to the Josiah Macy, Jr. Foundation*. Washington, DC: Author.
- The McKenzie Group. (1992, 1994). *Expanding Horizons: Success in High School and Beyond*. Washington, DC: Author.
- Bediako, Mary R., Ed.D., McDermott, Bridgett A., Ed.D.; Bleich, Maxine; and Colliver, Jerry A., Ph.D. (February, 1996). *Ventures in Education: A Pipeline to Medical Education for Minority and Economically Disadvantaged Students*. Academic Medicine. Vol. 71 No. 2. Washington DC: Association of American Medical Colleges.
- Colliver, Jerry A., Ph.D. (December 1994). *First Evaluation Report, Ventures in Science: Insuring Opportunity Now*. Springfield, Illinois: Southern Illinois University School of Medicine.
- Bailis, Lawrence Neil. (March 1995, December 1995, January 1997). *Evaluation of Walks of Life*. Waltham, MA: Brandeis University.

#### **ELEMENT 4 – EVALUATION/MONITORING**

**A. PROCESS USED TO DEVELOP INDIVIDUAL STUDENT INTERVENTION PROFILE:** In addition to examining results of standardized tests, such as the MEAP, and using these results as baseline data, the VESC field educator (trainer) will conduct pre and post performance assessments for each student, to determine appropriate goals and objectives. Each assessment will be subject area specific and will be graded using State and/or school Rubrics. IEPs, if available, will also be utilized. The trainer will present, evaluate, and revise instruction based on needs determined by testing and authentic assessment. In the early grades, running records, reading inventories, and anecdotal records will be kept; in the upper grades, there will be portfolios. Tests and assessments used by the program will conform to State and district formats. Item analyses of test results will be used to assess progress and needs. Specific interventions will be based on these assessments.